

09/890688

1/35

Fig. 1

HP02573	61"	YGRQDLHLRIFDSPEDIARADNIFTATERNRIDYSSAVIDHAPDLPRPEVCFIGRSN *****
Cgpa	1"	MFFAQPVSFIMGAVRMDAMPSDLPEVAFAGRSN
HP02573	121"	VGKSSLIKALFSLAPEEVRSKKPGHTKKMNTFKVKGKHTVVDMPGYGF-----RAPED *****
Cgpa	35"	VGKSSLINGL--VNQKYLARASNEPGRTRQINFELLAEKVRLVLDLPGYGFARVRSIADK
HP02573	176"	FVDMVETYLKERRNLKRTFLLLVDSVVGQKTDNTIALEMCEEFAFPYVILTRIDKSSKGH *****
Cgpa	93"	FQDLGRAYLGRANLKRVYVLIDARHGLKXVDLEALDALDVAAVSYQIVLTKADKIKPAAE
HP02573	236"	LLKQVQLQIKFVNMMKTQGCFPQLFPVSAVTFSGIHLRCFIASVTRGSLD *****
Cgpa	153"	VDKVVAAETQKAIKRAAA-FPRVLATSSSEKGLGMPPELRAEIVRLCIDE

09/890688

2/35

Fig. 2

3/35

6  
.  
00  
—  
E

HP10117	61"	KAKGKGQSQTRVNINAALVEDIINLEEVNEEMKSTVIEALKDNFNKTLNIRTSPGSLDKIA	** * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
RRF_BRUME	1"	MSDAFDINDLKRMEGAVNALXHDLGGLRTGRASASLLEPIT	
HP10117	121"	VVTADGKLALNQISQISMK3PQLILVNMASFPECTAAAI-KAIRESGMNLNPEVEGTLIR	** * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
RRF_BRUME	43"	IEAYGSTMPINQVANISV--PESRMLSVSWDKSMVGAVERAIRDSGIGLNPITDGMTLRL	
HP10117	180"	VPIPOVTREHREMLVVKLAKQNTNKADSLRLKVRTNSMNLKK-SKDT-VSEDTIRLIEQK	** * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
RRF_BRUME	101"	IRLPELNEQRRKELVKIAHQYAEQGRIAARHVRRIDGMDQLKLEKDSVVISQDESRLVSEK	
HP10117	238"	ISQMADDTVAELDRHLAVKTKELLG	** * . * . * . * . * . * . * . * . * .
RRF_BRUME	161"	VQKLTDFTIAEMDKIVAVKEGEIMQV	

4/35

## Fig. 4

HP10120 1' MQRVSGLLSWTL9RVLWLSGLSEPGAAARQPRIMEE-KALEVYDLIRTIRDPEKPNTLLEL  
\* . . \* . \*  
CEF45G2 1" MGGERLDNANPTLFDKPRHRPVTGTERDESVEDPIDSWEIFDLIRDINDPEEHPYTLEQL

HP10120 60' EVVSESCDEVQEINEEEYLVIIIRFTPTVPHCSLATLIVGNLHF  
. . . . \* . . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \*  
CEF45G2 61" NVVQEELIKV-FIDEEETFVVKVNFTPTIPHCSMATLIGLAIKVKKLRLSLHPKVKVSVSIT

卷之三

09/890688

5/35

50

FIGURE 6D 8890680

09/890680

6/35

Fig. 6

HP10582	1'	MDSNHQSNYKLSKTEKKFLRKQIKAKHTLLRHE-GIETVSYATQSLUVANGGLGN * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
YKY5_CAEEL	361"	RELSYFNEEAKRIGERFEGGKLAALKVHKSIEQQLKRHDPPDVQISTEPTKYLVSNSSILC
HP10582	55'	GVSRNQLLPV-LEKCGLVDAILLMPPNKPYSFARYRTTEESKRAYVTLLNGKEVVDLQKQKI *** . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
YKY5_CAEEL	421"	GVSLEEELIFLPLDELAEFTIVYPNKRYSYSFVQCSSIQSIEKSISQVRTELHGLIPPSLKNISHQ
HP10582	114'	TLYLNFVEKVQWKELRPQALPPGLMVVEEIIISSEEKMLLESVDWTEDTDNQNSQKSLKH * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
YKY5_CAEEL	481"	PFAISYVENLPEATKCEDFRPANLKIEEYVSSDLEKELVDLV-----TNHPSVQSLKH
HP10582	174'	RRVKHFGYEFHYENNNDKDKPLSGGLPDICESFLEKWLKGYIKHKPQDMTINQYEPQO * * *** . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
YKY5_CAEEL	535"	RAVVFHFGHVTDYSTNSASEWKE-ADPIPPIVNSLDRLISDKYITERPDQVTANVYEESGH
HP10582	234'	GIPAHIDTHSAFEDETVSLSLGSEIVMDFKH--PDGLIAVPVMLPSSLLVMTGESRYLWT * * *** . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
YKY5_CAEEL	594"	GIPSHYDTHSAFDDPIVTSISLLSDVVMEMFKDGANSARIAPVLLKARSLLCLIQGESRYRWK
HP10582	292'	HGLTCRKFDVTQASESLKSGIITSDVGDLLTSKRGRLRTSFTFRKVRQTPCNCSYPLVCDS * * *** . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
YKY5_CAEEL	654"	DPRTRNRRVVRQTRVSLTLRKIRRKPCCECEWKEFCDW

卷之三

U7/840688

6/1/35

F-16-50

HP10582	352"	QRKETPPSFPESDKEASRLEQEVYHQQVYEEIAGHFSSTRHTPPWPHIEFLKALPSGSIV
YKY5_CAEEL	700"	DRKGE-MSVPSNEDLALKLENSYVSDVYENIASHFDETRSSWKAVKQFINEIPRGSVMY
HP10582	412"	DIGCGNGKRYLGINKELYMERRVAALQEIVRLLRPGGKALIYVWAMEQEXNKQKSXYLRGN
YKY5_CAEEL	759"	DVGCGNGKYL-IPKDGGLKIGCDMCMGLCDIARKKDCHVARCDALALPF-----RYESAD
HP10582	472"	RNSQGKKEEMSDTSVQRSLIVEQMRDMSRDSASSVPRINDSQEGGCNSRQVSNSKLPVH
YKY5_CAEEL	813"	AAISIAVTLHIIATFERRKRLIEELLRVVKPGSKICVVT-VWSMDQSQSEYAKMRGNKDDV-
HP10582	532"	VNRTSFYSQDVLVPHLKGMPDKG-KPVEPPGPIGSQDPSPVFHRYYHVFREGELEGACR
YKY5_CAEEL	871"	AAAPAVSSEETQTTINRLLKVDGKDFFQQDVLPWTIDQKGETFLRYYHVFREGEAEKLIE
HP10582	591"	TVSDVRILQSYDQGNWCVILQKA
YKY5_CAEEL	931"	SVQGCKLISVEKEQGNY-IIIARKI

卷之三

۸۷۷ / ۸۷۷۸۶۸

7/35

F-18.7

HP10149	1'	MAMSFEWPWQYRFPPFTLQPNVDTRQKQLAAWCISLVLSCRLHKQSSMTVMEA
W02A11	1"	MAAATTASAFKWPWQYDFPPFTIQKSINTKDKQLEAWARLVIDYAQHNKIQSLDIAEA
HP10149	55'	QESPLFNNVKLQRKLPVESIQIVLEELRKGNLEWLDKSKSFLIMWRRPEEWGKLIYQW
W02A11	61"	TTSELFNNQKLNRRLSTDGVNTVLQYLEQQKLIETDNGRTRFHIFWRRRPDVWAQMIYQW
HP10149	115'	VSRSGQNNSVFTLYELTNGDTEDEFHGLDEATLRLRALQALQQEKAELITV- SDGRGV
W02A11	121"	AVENAFINTPLTYEITHGDDTNESFHNLEREILMKALTCLEEQRRAQLMNIGGDNEGV
HP10149	174'	KFF
W02A11	181"	KFI

09/890688

8/35

Fig. 8

HP10160	1'	MASRGKTEETSKLKQNLEEQLDRIMQQQLQDLEECCREELDTDEYEETKKEETLEQLSEEFNDSSL
ZK1248	1"	* * . * * * . * * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
HP10160	61'	KKIMSGNMTLVDELSGMQLAIQAAISQAFKTPEVIRLFAKKQPGQLRTRLAEMDRDLMVG
ZK1248	56"	* . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
HP10160	121'	KLERDLYTQQKVIELTALRKGEKLTADDEAFLSANAGAIALSQFERKVSTDLGSGDKILAL
ZK1248	116"	* . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
HP10160	181'	ASFEVEKTKK
ZK1248	174"	SPVFRVQIMASPKPKVRLDDKTENVSPWKAHHTEKKRFYTNDKTKESSLWDHPNTR

09/890688

9/35

6  
—  
4

HP10173	1'	MKLLTHNLLSSHVRGVGSRGFPLRLQATEVRICPVEFNPNEVARMIPKVEWSAFLLEA DN
C04H5	1"	MKLFVHNFMSSSRFLKNVTVGYPILNLVVKQQFEVKDIEFDRDNTIVMLDRIQYEALIVAAA
HP10173	61'	LRLIQ-VPKGVPVEGYEE-NEEFIRTMHHHLLEVEVIEGTLQCPESGRMFPISRGIPNM LL
C04H5	61"	VNQSDRIPREKPEKWDDELTDQRLRVFHLLMNIDVTDGELICPETKTVEPIRGIPNM LK
HP10173	119'	SEEETES
C04H5	121"	VDAEK

卷之三

Fig. 10

09/890688

10/35

HP02644	1	MKLIKDTKSRPKQSSSSCGRFQITKGDRVYGRWKETVKIDPNNPFDGQMDLVCFFELTDYQLVS
CELF55F8	1"	MENISIPGNPRTCDVEA---MDGDFDIONM-LQFLGSFEEVVL
HP02644	61	PARNPSSLFSKEAPKTRIAQAVSEEEEEEGRSSSPRKIKLKKSKRNVAATEGTSTQKRFEV
CELF55F8	38"	P--EGVVEVETKKGMKKKKPRKVENTERPEEDAKCVERRLLAKLRRKEQMAANRKQ---
HP02644	121	KDPELEAQGDDMVCDDPEAGEMTSENLVQTAPEKKKNKGKKGILEPSQSTAAKVPKKAKTWW
CELF55F8	93"	KRERL---AKRKQKEAESSARKSENAATETTTERKPKEQ-KRKKGGENGDTGK-PKSKSK--
HP02644	181	IPEVHDQKADVSAAWQDL-FVPRFVLRALSFLQFSAPTPIQALTAPAJRKLDILGAAET
CELF55F8	145"	--KEASKRTDISAWKQFYFLPNEVLEIAEQMGSFSEPTTEIQSAVLPAAVRDRQDVLGAAET
HP02644	240	GSGKTTLAPAJPMTHAVLQWQKRNAAPPSNTTAPPGETRSPGKAEAESDALP
CELF55F8	203"	*****GSGKTTLAPJGIPLYARLLESSSDSOETESTEVRGPR--

09/890688

10/1/35

Fig. 10-1

HP02644 300' DDTVIESEALPSDIAAEARAKTGGTVSDQALLFGDDDAEGGPPSSLIREKPVPKQNEEE  
CELF55F8 263" -----

HP02644 360' NLDEEQTGNLKQELDDKSATCKAYPKRPLLGLVLTPTRELAVQVKQHIDAVAREFTGIKTA  
CELF55F8 323" -----  
HP02644 420' ILVGGMSTQKQRMN-NRREIIVVATPGRMELIKCHY--HLENLRQLRCLVVDEADRM  
CELF55F8 383" SIVGGLAQVKQERITISQQRPDIVVATPGRLWAMMQUEAETGEFLAEWKILKCLVVDETDRM  
HP02644 477' VEKGHFAELSQLLEMNLDSQYNNPKRQTLVFSATLTLVHQAPARILHKKHFKMDKTAKLID  
CELF55F8 443" VEEGYFAELTHILNKIHEESEKKERLQTLVFSATLTFAKAQDVAAEEKKAKELSSQQKIQ  
HP02644 537' LLMQKIGMR-GKPKVIDLTRNEATVETLTETKIHCFET-DEKDFYLYYFTMQYPERSLVFA  
CELF55F8 503" RIIKLTGIRENKHRVIDLTRQMGTAGCLVEARINCGNLLERKDTSLVYLLTRYPFTIVV

10/22/60 30506860

09/890688

10/2/35

Fig. 10-2

HP02644	595	NSISCIKRRLSGLLKVKVLDIMPLTLHACMHQKQRNLQEFAILEDCCVLLATDVAARGLDIP
CELF55F8	563	" NSIDAARRULYSVLLKSVNIDPEMILHAKMIIQKQRNLERKSESKNAVLLATDVAARGLDIQ
HP02644	655	RVQHVIHYQVPRITSETIVHRSGRDARATNEGLSMLLIGPEDVINEKKIYKTLERKLEDIPL
CELF55F8	623	" GILHVIHYQVPKVETIYIHRSGRTARASHERGLTVLVLDPPSRQFTYMKLCKGLNRMQDILNV
HP02644	715	FPVQ-TKYMDDUVKERIRLARQIEKSETYRNFOACLENNSWIEQAAAALETELLEDYKGGKA
CELF55F8	683	" FPDIDFEPLMNAJERKRVRLASEIDSLGFRCKKIRMSESPFEKAARAADLDYDETRREMDG
HP02644	774	DQQTERRRQKQMKVTKKELLRHILLSQPLFTESQKTKYPTQSCKEPPLVSAFSKSESAISCL
CELF55F8	743	" LNLEVDTMVQKSRQLQAQLRTELSSLPLPRVDGSDSMKRTKTYITPEIVARLRSVGDNAJDDVL
HP02644	834	S-KQKCKKCKTCKRQKREPQPEQQQPSTSAN
CELF55F8	803	" NORIDETKEMRKTSRKATTEDEDMNSMKRKLSSSOTONKTCERLAEXKDKKQETGAKVTKLSEFD

FIGURE 11

Fig. 11

09/890688

11/35

HP03233 1' MAAPGSCALWSYCCRGWSRAAMRGQQLLGLRSSLWPGDLLSARLLSQEKRAAETHFGFETVS  
SPUBM 1" MSRLRAPVAKFLADGLKGIRSTALAGSRISN-CRYTSTSSSKDTDSSHMTHEFGFKDVP

HP03233 61' EEEKGKKVYQVFESVAKKYDVMNDMMSLGIHRVWKDLILWKMHPLPGT---QLLDVAGGT  
SPUBM 58" EDEKEHLLVKNVFSSVAKKYDEMDAMSLGIHRVWKNIFVSRINPGNISTVPMKILDVAGGT

HP03233 118' GDIAFRFLNYVQSQHQRKQQRQLRAQQNLSWEELAKEYQNEEDDSLGGSRVVVCDINKEMI  
SPUBM 118" GDIAFRILNHATNHNQDRNTRVV-----ADINPDMI

HP03233 178' KVG-KQKALAQGYTAG-LAWVLGDAEEL-PFDDDKFIDYTIAFGIRNVTHIDQALQEAEHR  
SPUBM 150" SVGLRRSKKTPYYDSGRVRFIEQNAEILDKIPDNSIDMYTIAFGIRNCNTHIPKVLEQAYR

HP03233 235' VLKPGGRFLCLEFSQVNNPLISRLYDLYSFQVIPVLGEVIAGDWKSYQYLVESIRRFP\$Q  
SPUBM 210" VLKPGGVFSCLAEFSKVYPAPLAELYRQYSFKILPLLGTTIAGDSQSSEYLVESTIERFPDA

HP03233 295' EEFKDMIEDAGF---HKVTVESLTSGIVAIHSGFKL  
SPUBM 270" KTEARMIEDAGFTLAGETGYETLSFGIAAIHTGIKL

09/890688

12/35

Fig. 12

HP10437 1' MQKSCEEENEGKPQNMMPKAEDRPLEDVPQEAEGNPNPQQPSEEQGSQEAEGNPRGGPNQPGQG  
\*\*\*\*\*. . \* \* \* \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* .  
pp21 1" MKSCQKMEGKOPEN---ESEPKHEEFPKPEEKPEEEFKLEEAKAKGTFRERLIIQSLQE

HP10437 61' FKEDTPVRLDPEEMIRGVDELERLREEIRRVRNKFVMMHWQRHRSRSRPYPCFRP  
\*\*\*\*\*. . \* \* \* \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* . \* .  
pp21 56" FKEDIHNRHLSNEDMFRREVDEI---DEIRRVRNKLIVMRWKVNRRNHPYPYLM

09/890688

13/35

F-88.13

HP10525	1	MELSAEYLREKLQRDLEAERHEVEVEDTTLNRCSCSERFLVVSAAKFEKGKPLLQRHRLVNACL
SPAC8C9	1"	MVNAQQLELLIQTNTLEPTHIELQDM- SGCGQNEEVIVSPLFEKGKSTLARHRLVNHKL

HP10525 61 AEELPHIHAFEQ-KTLLTPDQWARERQK  
\* . \* \* \* . \* . \* .

SPAC8C9 59" QEVIXDIHAFTQVVRTLSFRHIR

09/890688

14/35

Fig. 14

HP10543	1	MAATEPILAAATGSPAAVPPEKLEGAGSSAVERNCVGSSLPEASPPAPEPSSPNAAVPEA
LEAP1	1"	MAAPQPSQDPQSPAAPEQQEGAGDCA
HP10543	61	IPTPRAAASAALPLGPAPVSVAPQAAEAFARSTPGPAGSRLGPETFRQRFRQFRYQDAA
LEAP1	28"	APSPDGSSSPAEPLGAPAAINTAPYADAVLR---PGASRPGPETFRQRFRQFRYQDAA
HP10543	121	GPREAFRQLRELSRQWLRPDIRTKEQIVEMLVQEQLAILPEAARARRRRTDVRITG
LEAP1	84"	GPREAFRQLRELSRQWLRPDIRTKEQIVEMLVQEQLQAIILPEAARARRRRAVDVRITG

09/890688

15/35

15

HP03090	1'	MAAFRALHFVFKVGNRFQTARFYRDVLGMKVLRHEEEGCKAACNGPYDGWSKTMVGF
CEHYP0	1"	MTARALHYVFKVANRAKTIIDFFTNVLMKVLRHEEEFKGCEATCNGPYNGRWSKTMIGY
HP03090	61'	GPEDDHFVAELTYNYGYGDYKLGGNDFMGITLASSQAVSNARKLEWPILTEVAEGVFEATEAP
CEHYP0	60"	GSEDEHFVLEITTYNYPIMKYELGNDYRAIVIDSDQLEFKVEKIN--HRKSGCGRLAVKDP
HP03090	121'	GGYKFLQNRSLPQSDPVLKVTLAVSDLQKSLNLYWCNLLGMKLYEKDEEQRALIYGADN
CEHYP0	118"	DGHEF--KIGKADQSPKVLRVQVNUGDLEKSKKYWNELGMPIIVEKSSRIR--MSYGDG
HP03090	181'	QCKLELQGVKGVDHAAAFGRIAFCSCPQKELPDLEDLMKRENQKILLTPILVSLDTPGKATV
CEHYP0	174"	QCELEIIVKSQDKIDRKTFGRIAFSYPEDKLESLQDKRISANGTIINELITPLTPGKADU
HP03090	241'	QVVVILADPDGHEICFVGDEAFRELSKMDPEGSKLLDDAMAADKSDEWEAKHNKPKASG
CEHYP0	234"	QVVVILADPDGHEICFVGDEGFRALSKIDDKAESSELKEQIKKDDSEKWI

09/890688

16/35

16

HP03145	1	MLGSRAAGFARGRLRALALAWLPGWGRGRSFALARAGAAPHGGDLQPPACPEPRGRQLSLSA
SCCOQ2	1"	MIIKPIASPARYFLRTPSWAVAIFFQAVKIKPLQLRTNSSNSVTPNLLSPSK
HP03145	61"	AAUVDSAPRPLQPYLRLMRLDKPIGTWLLYLPCTWSIGLAA---EPGCFCFPDWYMLSLFGT
SCCOQ2	53"	KSWKDLFSSKRWQYYAEIISRAGSPTGTLYLSPCTWSILMAAYADSSLVNVTKMLALFGV
HP03145	118"	GAIILMRGAGCTINDMWDQDYDKVTRTANRPIAAGDISTFQSFVFLGGQTLPLAGVLLCL
SCCOQ2	113"	GSEFLMRSAAGCVINDLWDRELDKVERSRSRPLASGKLSVRQAISLLSVQLTASLGILLQL
HP03145	178"	NYYSIALGAGSSLVITYPLMKRISYWPKQALGLTENWGAIIKG-SC-DPSVCLP
SCCOQ2	173"	NPYTIIKLGVASLVPVCIYPAMKRITYYPQVVLGLTFFGYGAVMGWPALAGEACMNNWSVVAAP
HP03145	236"	LYFSGVMWTLIYDTIYAHQDKRDDVLIGLKSTALRFGENTKPWLSGFSVAMIGALSLVGV
SCCOQ2	233"	LYLSTISWIVLYDTIYAHQDKRDDVKANIYSTALRFGDNTKPVLCGLAALQIATLATAGI
HP03145	296"	NSGQTAPYYA-ALGAVGAHLTHQIYTLDIHRPEDCWNKFTISRTLGLIVLFGIVLGNLWK
SCCOQ2	293"	MNGQGPVFYTLGVAGAYRLSSMIIYKVDDDPKDCFRWFKRNNSNTGYLVVAIALDWLAK
HP03145	355"	EKRTDKTPKKKGLENKIEI
SCCOQ2	353"	SELYNDS

09/890688

17/35

Fig. 17

18/35

## Fig. 18

HP03324	1'	MALCALTRALRSLNLLAPPTVAAPAPSLEPAAQMMNNGLLQQPSALMLLPCRPLTSVALN
BRPL2	1"	MGLKRFKPKVTPGRRFMVIT
HP03324	61'	ANFVSMKSRTRKYITPVKMRKSGGRDHTGRIRVHGGHKQRYRMIDFLRFRPEETKSG
BRPL2	19"	SDFSDITKTEPEKSLLAPLKTKTGGGRNHHGRVTVRHGGGHKRRYRIIDFKRY---DKAG
HP03324	121'	PFEEKVIQVRYDPCRSADIALVA-GGSRKRWIIATENMQAGDTILSNHIGREAVAAREG
BRPL2	75"	-IPAKVLAIEYDPNRSARIALLYADGEKRYILAPKGVNVGDTLMSGPD---AEIRP--G
HP03324	180'	DAHPLGAIIPVGTLINNVESEPGRGAQYTRAAGAGGNVRNSNSRPSIQR
BRPL2	129"	NALPLEKIPVGTLVHNVEFTP GKGGQIARAAGTYCQIMAKEGNYALLRMPSGELRKVHVK

19/35

## Fig. 19

HP10648 181' LTPRAPGSPPRGQHEPSKPPAGEVTGGFGAKRKRGSSSQAPASKKLNLKEELPVIPKGKP  
 CEY40B1B 1" MSTGANILLVMNDTC  
 HP10648 241' KSGRVWVKDRSKKKRFSQMLQDKPLRTSWQORKMKERQERKLAKDFAHLEEKERRRQEKKQ  
 CEY40B1B 15" KSNRWWKTKQEKKHSEIKCVKTLKSTWDKKMELKAKKDMVKRVQDNIREKQVQERQEKK  
 HP10648 301' RRAENLKKRLLENERKAEVVQVIRNPARKKKQLRSIEKRTDLALLQKQPPQQPAAKI  
 CEY40B1B 75" RKVEQEKKRLLENERKAELIVQKITKIHKLKKTRKQLRSIQMRTDTQVTK

20/35

Fig. 20

HP10162	1'	MEPQEERETQVAWLKKIFGDHPIPQYEVNPRTEILHHLSENRVRDRDVLYLIEDLKQ
RNUNK	1"	MAALEEKASQVAEWLKKIFGDHPIPQYEMNARTTEILYHHLSENRVRDRDVNLVIEDLRP
HP10162	61'	KASEYESEAKYLQDLMESVNFSPLANLSSSTGSRYLNALVDSAVALETYKDTSLASFIPAVN
RNUNK	61"	KASEYESEAKRLEDLFMELSVNFSPLANLNTGSRFLNALVDSAIALEIKDTSLASFIPAVN
HP10162	121'	DLTSDLFRTKSKSEEIKLEKLNLTATLVLEKCLQEDVKAELHLSTERAKVDNRRQ
RNUNK	121"	DLTSDLFRTKSKSEEIKLELGXLEKLNLTATLVLEKCLREDLKKADVHLSAERAKAEGRLQ
HP10162	181'	NMDFLKAKSSEEFRFGIKAAEEQLSARGMDASLSHQSLVALSEKLRKQQTIPLKXKLES
RNUNK	181"	NMDFLKAKAAEFRFGIRAAEEQLSSRGMDASLSHRSLSVALSDKLSELKQQTIPLKXKLES
HP10162	241'	YLDLMPNPSLAQVKIEEAKRELDSTIEAELTRRVDMTEL
RNUNK	241"	YLDLMPNPSLAQVKIEEAKRELDSTIEAELTRRVDMTEL

09/890688

21/35

Fig. 21

HP10334	1	MSGRLRVYSTSVTGSREI <b>K</b> SQQSEVTRILD <b>K</b> R1QYQLVDI <b>S</b> QDNALRDEM <b>R</b> ---	ALAGNP
		***** . * * * . * * * . * * * . * * * . * * * . * * * . * * * . * * * .	***
HS3H3	1"	MVIRVYIASSSSGSTA <b>I</b> KK <b>Q</b> DVL <b>G</b> FEANKIGFEERDIA <b>A</b> NEENRKWMRENVPNSRP	
HP10334	58"	KAP---PPQIVNGDQYCGDYELFVEAVEQNTLQEFFLKLA	
		***** . * * * . * * * . * * * . * * * . * * * . * * * .	***
HS3H3	60"	ATGYELPBPOLNESOYRGDYDAFFEARNNAVYAFGLLTAPPGSKEAEVQAKQQA	

22/35

## Fig. 22

HP10532	1'	MAGSEELGLREDTLRVLAFLRRGEAAGSPVPTPPRSPAQEEPTDFLSSLRRCLPCSLGR
HSBBK	1"	MAGSEELGLREDTLRVLAFLRRGEAAGSPVPTPP-SPAQEEPTDFLSSLRRCLPCSLGR
HP10532	61'	GAAPSESPRPCSLPIRPCYGLEPGPATPDFYALVAQRLEQLVQEQLKSPPSPELQGPPST
HSBBK	60"	GAAPSESPRPCSLPIRPCYGLEPGPATPDFYALVAQRLEQLVQEQLKSPPSPELQGPPST
HP10532	121'	EKEAIIIRHVALLEEAEVINQK-----
HSBBK	120"	EKEAIIIRHVALLEEAEVINQKLAASDPALRSKLVRLSSDSSRPSR
HP10532	181'	-----EGILAV
HSBBK	180"	ACPGPPPSPEPLARLALAMELSRRVAGLGGTLAGLSVEHVHSFTPWIQAHGGWEGILAV
HP10532	241'	SPVDLNLPLD
HSBBK	240"	SPVDLNLPLD

Fig. 23

HP10559	1'	MPVKKRKSPGVAAA * * * .	MPVKKRKSPGVAAA * * * .
K1AA	61"	QTGSLRSCSSSDCFNCKMP * * * .	PRKKR * * * .
HP10559	44'	EHFSSKKCLAWFYAYGPDEV * * * .	GPEGMKEFC * * * .
K1AA	116"	EAFFSKRCLEWFYAYGTDD * * * .	VVGPEGMKEFC * * * .
HP10559	104'	EEWLKGMTSLQCDCTEKLN * * * .	QNKFDFLRSQ * * * .
K1AA	176"	QEWLKGMTSLQCDTT * * * .	TEKLRTNLDYL * * * .
HP10559	164'	SMLALLLGRITWPLF * * * .	SVFYQYLEQS * * * .
K1AA	236"	CMLGLLGIWPLF * * * .	PVFHQFLEQS * * * .
HP10559	224'	LDEFVEWQKVRQTS * * * * * .	LDEFVEWQKVRQTS * * * * * .
K1AA	296"	LDEFVEWYKDKQMS * * * * * .	LDEFVEWYKDKQMS * * * * * .

702260 " 23906860

Fig. 24

24/35

09/890688

HP10562	61'	QESEPEDEFKLKFIDPNEVYCSEASPGSDSGISEDPCHPDSPPAPRATSSPMLYEVVYEAQ
LZIP	1"	MELELDAGDQDLLAFLLEESGDLGTAPEAVRAPLDWALPLSEVPSDWEVDDL
HP10562	121'	ALERMQGETGPNVGLISIQLDQWSPAFMVPDSCMVSELFDAAHILPRAVTAPVPCPT
LZIP	54"	LCSLLSPPASLNLLSSSNPCLVHHDDHTYSPLPRETVSMDLESSCRKEGTQMTPQHMEELA
HP10562	181'	LLPCQTLFLTDEEKRLGQEGVSLPSHLPLTKAEEERVLKKVRRKIRANKQSAQDSRRKKKE
LZIP	114"	EQEIAARVLVTDEEKSLEKEGLLILPETLPLTKTEEQILKRVRRKIRANKRSAQESRRKKKV
HP10562	241'	YIDGLESRVAAACSAQNQELQKKVQFELERANISLVAQLRQLQTLIAQTSNKAAQTSSTCULI
LZIP	174"	YVGGLERVLKYTAQNMELQNKVQQLLEEQNLSSLLDQLRKLQAMVIEISNKTSSSSTCILV
HP10562	301'	LLFSLALLLILPSESPFQSR---PEAGSEDYQPHUGVTSRN--ILTHKDVTNLETQVVESS
LZIP	234"	LLVSEFCLLLPAMYSSDTURGSLPAEHGVLSRQLRALPSEDPYQLEILPALQSEVPKDSTHQ
HP10562	355'	RLREPPGAKDANGSTRTLLEKMGKPRPSGRIRSVLHADEM
LZIP	294"	WLDGSDCVLQAPGNTSCLLHYMPQAPSSEPLCRGPILPLQANLTRKG

09/890688

25/35

Fig. 25

HP10456	1'	MSNMKEKHLFNLKFAAKELRSAAKKCDKEKAEEKAKIKKAIQKGNMVEARIHAEN
CEBC-2	1"	MGAGESSMALEKHLFDLKFAAKQLEKNAQRCEKDEKVEKDILTAIAIKKGNKEVAQVHAEN
HP10456	55'	AIRQKNQAVNFLRMSARVDAVAARVQTAVTMGKVTKSMAGVVKSMDAATLKTMMLEKISAL
CEBC-2	61"	AIRKKNEAVNYTIKMAARIDAVALAARVQTAATQKRVTAMSGVVKAMESAMKSMNLKEKVQQL
HP10456	115'	MDKFEHQFETLDVQTQQMEDTMSSTTTLTPQNQVDMILLQEMADEAGLDLNMMELPQGQTG
CEBC-2	121"	MDRFERDFEDLDVTTKTMKTDGTIVLNAPKSQVDALIAEADKAGIELNQELPSNVPT
HP10456	175'	SVGTSV-ASAQDELSQRQLRLRDQV
CEBC-2	181"	ALPTGTQAVSEDKDLTERLAAALRNW

26/35

## Fig. 26

HP10498	1'	MAEPSLRGRLARFGNPRKPVLKPNKPLILANRV-GERRREKGEATCITEMSVUMMA
CEC24	1"	MFSSPLKEKALARGKSIYPKVAVFSEILPLASKNRVQAGQKPRRAASSSCTQELQALEG
HP10498	55'	CWKQNEFRDDACRKEI QGFLIDCAAR-AQEARKMR--SIQETLGESGSLLPNKNLNLQRF
CEC24	61"	CLKKWEFDDVPCSKQHTLYMDCVHKGAEEAAAYRDAFRKGTLGESGAGGGKQSMTSAQFMK
HP10498	112'	PNKPYLS
CEC24	121"	IQKLFPPQDLGKQPYRQMQRRLPTQDYADDTEHRSKHWSGKRS

卷之三

09/890688

27/35

Fig. 27

HP10505	1	MAKHLKFIAARTVMVQEGNVESAVRTLNRLTILMDGLIEDIKHRRYYEKPCRRQRESYRC ***** * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
CEF29	1"	WVONNNDVDAFGLLNRLMDSEGMLKLTRTOFYOKPYMORKTSLMSMEAS

HP10505 61. RR1YNMEMMARKINFLMRKNRADPWQGC

CEF29 49" TAIFNEDMRKMKFLVRKNRPDKHPGQVTS  
\* \* . \* \* . \* \* . \* \* . \* \* . \* \* . \* \* .

卷之三

09/890688

28/35

F i g . 2 8

HP10515	1'	MFLTAL-LWGRGRIPGRQWIGKHRPRFVSLRAKQNMIRRLIEAENHYWLSMPYMTREQE	* * * . * . * * . * * . * * . * . * . * . * . * . * . * . * . * . * .
DM63B	1"	MHLTLLINLFKTKTVPGHIFRGKRRLVKPVSQRAMDITLTREYERQEQQVMLLRRHPYXLTMEQS	
HP10515	60'	RGHA-AVRRREAFEA--IKAATSKFPPHRFIADQLDHLNVTKWSS	* * * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
DM63B	61"	FGHAKELOKREKLVARWTDEOTLRKMKPHVTIEERLNOLKIKKEAWD	

10260 " 23206260

09/890688

29/35

Fig. 29

HP01124	1'	MGTEKESPEPDCQKQFQAAVSVIQNLPKNGSYRPSYEEMLRFYSYKQATMGPCLVPRPG
HSACBP	1'	MSQAEFEKAEEVRHL-----KTPKSDEEMLFIYGHYKQATVGDINTERPG
HP01124	60'	FWDPIGRYKWDAWNLSLGKMSREEMASAYITEMKLVAQKVIDTVPLGEVAEDMFGYFEPFLY
HSACBP	47"	MLDFTGKAKWDAWNELKGTSKE.DAMKAYINKVEELKKYGI

09/890688

30/35

Fig. 30

09/890688

31/35

Fig. 31

HP10101 1' MKAVKSERERGSRRRRHLDGVVLPAGVVKQERLSPEVAPPAAHRRPDSGGSPSPPTSEP  
HP10101 60' ARSGHRRGNNRARGVSRSPKKKKKNAASGRRSKSPRSKRNRSRPHHSTVKVKQEREDHPRRGRE  
CEC32E8 1' MGRDSPRDRRHRDRSPERRRSRSRDRQTRRD-T  
HP10101 121' DRQHREPSEQEHRRARNSDRDRHRGHSHQRRTSNERPGSGQQGRDRDTQNLQAQEEERE  
CEC32E8 36" RRDSPKIKREVKEEQFSNDSPRRRRDGGRRDDRNRRDDRRDHRDDRGDRDRRD  
HP10101 181' FYNARREHRQRNDVGGGSESQELVPRPGGNNIKEKEVPAKEKPSFELSGALLEDTNTFR  
CEC32E8 95" NF--RRPDPPVREDGKQYGLEKKEENWGKPEEPAKEK---EKVNVLGTSGALTEDNTFR  
HP10101 241' GVVVKYSEPEARIPKKRWLYPFKNDDEVLPVMYIHRQSAVLLGRHRRRIADIPIIDHPSCS  
CEC32E8 148" GVVVKYNEPPEAKPKPNARWRLYPFKGEEQLQVTLIYIHRQSAVLLGRDHKIADIPIVDPHPS  
HP10101 301' KQHAVFQYRLVEYTRADGTGRRVVKPYIIDLGSGNGTFLANNKRIEPQRYELKEKDVLKF  
CEC32E8 208" KQHAVLQFRSMPFTRDDGKARRIMPYIIDLGSGNGTFLNEKKIEPQRYIELQEKDMLKF  
HP10101 361' GFSSREYVLLHESDTSEIDRKDDEDELEEEEVSDS  
CEC32E8 268" GFSTREYVUMKEREIITEELAEGEDVKEESE

10/22/60 3906360

Fig. 32

09/890688

32/35

HP10370 1" MEYDEKLARERQAHINPFRNKQSPRQHTEQGPGEEVFDVTPPEALPELPPOEPEP  
DMCG115 1" M38WKDSLT81P7VTAQLINEASNLHASS8T808T8VGLGG88T998SEAGGSEESGPQ  
HP10370 55" RCPERVMDLGQBEDIF8RPVGLFLASDVQLRQAIEECKQVILELPQ8EKQKDAVVRLL  
DMCG115 61" GAEYRALP1P81LVRQEWRI1F8DANIQDLQAAIAHCRDLVILSEELSEERRWLVRILV  
HP10370 115" HLRKLQELKDPE-----DEPNIRVLLER-----YEKEKSK8WQTCDK  
DMCG115 121" DLRYSLQELEEAQE8H1L89DMVVMNAIRAVVGNIFV8P8HNGKRNRLQAAAKNYCDH  
HP10370 156" CNTLIWGLIQTWYTCTGCYCYRCH8KCLNLISKPCVS8KV8HQAEXELN1CPE7GLDSQDY  
DMCG115 181" CTTIWSVVQ8V8YVC9DCGFLVHQKCIDGVKRVCAHVLVERQHPI8EICPEIGLA8QGY  
HP10370 216" RCAECRAPISLRGVPSEARQCDY8Q8YCS8C8WDLAVIPARV8V8N8DFEPKV8RC8M  
DMCG115 241" KCAEC8TM8LN8KNTWIEPRLCDY8G8LYCPRCN8W8SN8F1PARI8V8N8DFEPKV8RTAL  
HP10370 276" RYLA8MV8RPV8LRLREINPL8SYVEELVEIRKL8QD8L8LMKP8YF8TCR8E8ARLL-1Q  
DMCG115 301" QEI8FLNKPLR8LEEDNP8KL8F8VERKL8AVKKL8RQN8L8M8Y8LACK8I8E8KL8VDQ8  
HP10370 335" LQDRQH8V8N8D8M8S8QD8L8D8V8A8R8G8S8L8T8I8L8F8AKH8I8K8D8C8R8Q8A8K8F8C8L8R  
DMCG115 361" LGVRAH8LAQ8N8F8Y8L8D8L8Q8V8S8G8L8E8F8Q8V8K8A8F8M8C8L8Q8A8Y8C8I8S  
HP10370 395" EGDV8L8P8F8D8H8S8V8C8D8A8V8F8R8D8C8Y8D8N8S8T8C8P8K8C8A8L8K8Q8S8F8Q8G8P8I8A  
DMCG115 420" NNEV81F8P8D8G8C8K8C8I8K8C8N8I8F8H8V8C8L8R8N8M8C8P8K8C8I8Q8E8R8L8M8K8T8D8D8D

09/890688

33/35

33

HP10427	1	MAGPAAAFRRRLGALSGAAALGFAASYGAH--	--GAQFPDAYGKELFDKANKHHFLHSLLLG
		*** * * * * . * * * . * * * . * * * .	* * * * . * * * . * * * . * * * .
CEY106G	1"	MSPPIIRLAGLSSGAVAISLGAYGSHVLRDNPSIDERRRTAFDTASRYHLIHSLLALA	
HP10427	58	VPHCRKPLWAGLLLASGTTLFCFTSFYYQALSGDPSIQTLA	PAGGTLLLGWLALAL
		* * * . * . * . * . * . * . * . * . * . * .	* * . * . * . * . * . * . * . * .
CEY106G	57"	SPAAAREPLVTAGLETAGITLFCGGPCXHYSISGVEETRKYTFIGGVTLLIIAWLSPFL	

09/890688

34/35

Fig. 34

Fig. 35

HP10580 1' MRCKFFQEFKADIKFK  
 DMCG546 61" TLLKVLIVLILLGTCVLAGYSWSIYGRVITEKFPSTILKEELKLSKAAEAFFKLNLITGS  
 HP10580 16' SAGPGQKRLKESTVGEKAHREKPNQ--PAPRPRQGPTNEAQMAAAAALARLEQKQSRRAWGP  
 DMCG546 121" GMGTGHLNLNSPKQETPSSSSRQKYEAYVPPKRNEISNEARAAASAALARIDRKRTSREFN-  
 35/35  
 HP10580 74' TSQDTIRNQVRKELQAEATVSGSP-EAPGTINVVUSEPREGSA-HLAVPGVYFTCPL-TGA  
 DMCG546 180" TLSAVAKAQAERLEAERRQREEAMGTPSTTSSTSASGGDTRNLAEGVFFRCPLISEE  
 HP10580 131' TLRKDQRDACKEAILLHFSTDPVAASIMKITYTFNKDQDRVKLGVDTIARYLDDNIHLHPE  
 DMCG546 240" ILPKSVWKRVRKREFLYQQLEADRGGLTACLLIHNCN-VKERADECIATLIRYLENLIRNPE  
 HP10580 191' EKYRKIKLQNKVFOERINCLEGTHEFFEAIGFQKVLLPAQDQEDPEEFYVLSSETTLAQP  
 DMCG546 299" EERFKCKIRMSNKIFSEKVRVYVEGALDVLQAAGFNEV---QIDGEPPFLLWTKEQTEKID

卷之三

09/890688

35/1/35

Fig. 35-1

HP10580	251	QSLERHKEQLLAAEPVRAKLDQRQRRVFPQPSPLASQFFELPGDFFENLTAAEIKREQRILRSEA
DMCG546	353	LDLPTLVEALKSSEITIPLEKLDRNTRVLLPSQ-ACRVALPDEFYRLSPEEIKKEQQLRSEA
HP10580	311	VERLSVLRKAMREKKEQORGILRKYNTILLRVRLPDGCLLQGTFYARERLGA VYGFVREAL
DMCG546	412	IAQSQMLRTKAMREREQRNRLRMYRYALVRVKFPNGLFIQGTFNVYEKISDVFEEFVQSCL
HP10580	371	QSDWLPFELLASGGQQKLSEDE-NLALNECGLIVPSALLTFSWDMAVLEDIKAAAGAEPSD SIL
DMCG546	472	ADESLDFSLVNSNDGKLGDEDLEKTLYDCKLIPNTLILFSANDTPAPLQTDINYLKEDLL
HP10580	430	KPELLSATEKLL
DMCG546	532	MLVQAM